Abstract of the Disclosure

In a liquid chromatograph mass spectrometer, a liquid sample supplied from an LC portion is nebulized in an ionization chamber, and the produced nebulized sample is ionized by applying a high voltage thereto and is introduced into a mass spectrometry chamber. A supply flow path of a nitrogen gas and an oxygen gas is connected to the ionization chamber, and a control mechanism for controlling a composition ratio of the nitrogen gas and the oxygen gas in the ionization chamber is provided to thereby ionize at an optimum gas composition ratio.